

IN THE CLAIMS:

Please amend claims 1, 7 and 8 as follows.

1. (Currently Amended) A base station of a cellular telecommunication system, comprising:

an antenna unit ~~for~~ configured to receive and transmit radio frequency signals ~~reception and transmission~~;

an electronically tunable diplexer connected to the antenna unit ~~for~~ configured to separate ~~ing~~ a transmit radio frequency band from a receive radio frequency band, a tuning range of the electronically tunable diplexer covering at least two radio frequency sub-bands used parallel in a telecommunication system, the electronically tunable diplexer being tunable, on site, to a radio frequency sub-band allocated to a base station;

a transceiver connected to the electronically tunable diplexer ~~for~~ configured to ~~performing~~ a conversion between a fixed frequency band and the radio frequency sub-band allocated to the base station; and

wherein the transceiver includes a signal conversion chain ~~for~~ configured to ~~performing~~ at least a portion of the conversion, at least a portion of the signal conversion chain being shared between frequencies within the tuning range.

2. (Original) A base station according to claim 1, wherein the electronically tunable diplexer is configured to operate in a receive tuning range

covering receive sub-bands of at least two system bands, the electronically tunable diplexer being tunable, on site, to a receive sub-band allocated to the base station.

3. (Original) A base station according to claim 1, wherein the electronically tunable diplexer is configured to operate in a transmit tuning range covering transmit sub-bands of at least two system bands, the electronically tunable diplexer being tunable, on site, to a transmit sub-band allocated to the base station.

4. (Original) A base station according to claim 1, wherein the electronically tunable diplexer is configured to operate in a receive tuning range covering at least two receive sub-bands of a system band, the electronically tunable diplexer being tunable, during operation, to a receive sub-band allocated to the base station.

5. (Original) A base station according to claim 1, wherein the electronically tunable diplexer is configured to operate in a transmit tuning range covering at least two transmit sub-bands of a system band, the electronically tunable diplexer being tunable, during operation, to a transmit sub-band allocated to the base station.

6. (Original) A base station according to claim 1, wherein the electronically tunable diplexer is tunable, on site, to provide a passband narrower than a system band allocated to the base station.

7. (Currently Amended) A base station according to claim 1, further comprising a control unit connected to the electronically tunable diplexer and the transceiver ~~for configured to controlling~~ frequency characteristics of the base station.

8. (Currently Amended) A base station according to claim 1, wherein the electronically tunable diplexer comprises a receive portion and a transmit portion connected to the antenna unit;

wherein the transceiver comprises a transmitter connected to the transmit portion of the electronically tunable diplexer, and a receiver connected to the receive portion of the electronically tunable diplexer;

the base station further comprising a generator connected to the transmitter ~~for and configured to provide ing~~ the electronically tunable diplexer with an input test signal characterizing the radio frequency sub-band allocated to the base station;

a transceiver loop connected to the electronically tunable diplexer and the transceiver ~~for configured to delivering~~ a portion of the input test signal and a

portion of an output test signal generated from the input test signal in the electronically tunable diplexer to the receiver;

an analyzer connected to the receiver and a control unit ~~for~~ configured to determine ~~ing~~ a response of the electronically tunable diplexer to the input test signal based on the portion of the input test signal and the portion of the output test signal; and

the control unit connected to the electronically tunable diplexer and the generator ~~for~~ configured to controlling tuning of the electronically tunable diplexer based on the response of the electronically tunable diplexer to the input test signal.

9. (Original) A base station according to claim 8, wherein the transceiver loop is configured to convert the portion of the input test signal to a receive sub-band allocated to the base station.

10. (Original) A base station according to claim 8, wherein the transceiver loop is configured to convert the portion of the output test signal to a receive sub-band allocated to the base station.

11. (Original) A method of configuring a base station in a cellular telecommunication system, comprising:

tuning, on site, an electronically tunable diplexer connected to an antenna unit, a tuning range of the electronically tunable diplexer covering at least two

radio frequency sub-bands used parallel in a telecommunication system, to a radio frequency sub-band allocated to a base station; and

adjusting a transceiver connected to the electronically tunable diplexer to perform a conversion between a fixed frequency band and the radio frequency sub-band allocated to the base station, the transceiver including a signal conversion chain for performing at least a portion of the conversion, at least a portion of the signal conversion chain being shared between frequencies within the tuning range.

12. (Original) A method according to claim 11, further comprising:
tuning the electronically tunable diplexer, the tuning range of the electronically tunable diplexer covering receive sub-bands of at least two system bands, to a receive sub-band allocated to the base station.

13. (Original) A method according to claim 11, further comprising:
tuning the electronically tunable diplexer, the tuning range of the electronically tunable diplexer covering transmit sub-bands of at least two system bands, to a transmit sub-band allocated to the base station.

14. (Original) A method according to claim 11, further comprising:

tuning the electronically tunable diplexer, the tuning range of the electronically tunable diplexer covering at least two receive sub-bands of a system band, to a receive sub-band allocated to the base station.

15. (Original) A method according to claim 11, further comprising:

tuning the electronically tunable diplexer, the tuning range of the electronically tunable diplexer covering at least two transmit sub-bands of a system band, to a transmit sub-band allocated to the base station.

16. (Original) A method according to claim 11, further comprising:

providing the electronically tunable diplexer with an input test signal characterizing the radio frequency sub-band allocated to the base station;

delivering a portion of the input test signal and a portion of an output test signal generated in the electronically tunable diplexer to a receiver;

receiving the portion of the input test signal and the portion of the output test signal in the receiver;

determining a response of the electronically tunable diplexer to the input test signal based on a received portion of the input test signal and a received portion of the output test signal; and

tuning the electronically tunable diplexer based on the response of the electronically tunable diplexer to the input test signal.

17. (Original) A method according to claim 16, further comprising:
converting the portion of the input test signal to a receive sub-band frequency.

18. (Original) A method according to claim 16, further comprising
converting the portion of the output test signal to a receive sub-band allocated to the base station.

19. (Original) A base station in a cellular telecommunication system, comprising:

tuning means for tuning, on site, an electronically tunable diplexer connected to an antenna unit, the a tuning range of the electronically tunable diplexer covering at least two radio frequency sub-bands used parallel in the a telecommunication system, to a radio frequency sub-band allocated to the a base station; and

adjusting means for adjusting a transceiver connected to the electronically tunable diplexer to perform a conversion between a fixed frequency band and the radio frequency sub-band allocated to the base station, the transceiver including a signal conversion chain for performing at least a portion of the conversion, at least a portion of the signal conversion chain being shared between frequencies within the tuning range.